

Work in progress

Sussex and East Surrey Local Digital Roadmap

Name of LDR footprint: Sussex and East Surrey

Region: NHSE South

Nominated lead of the LDR including organisation/function: Dr Adrian Bull,
Chief Executive, East Sussex Healthcare Trust

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13th January 2017



Executive summary

This document summarises our work to date to deliver Digital enablement to the Sustainability and Transformation Plan (STP) for Sussex and East Surrey through the delivery of Digital technologies. It builds on our Local Digital Roadmap (LDR) submissions to NHSE in June and October 2016.

The Local Digital Roadmap sets out how we will develop paperless working for the NHS and social care across Sussex and East Surrey by 2020. It also describes how we will enable the development of additional services through the use of digital technologies.

Having developed our Programme plan we are now progressing with resourcing the Programme and delivering a detailed plan for each priority. There are still several unknowns, including the agreed approach to Interoperability and the associated funding. We have structured our Programme into five domains which are, Exploiting Existing Technology, Shared Health and Care Information, Analytics, Service Redesign and Citizen. Our plans will be reviewed and adjusted as further clarity is provided. In order to provide Programme assurance we have established a Digital Governance structure, which is a formal part of the wider STP Governance and is chaired by the CEO of East Sussex Healthcare NHS Trust, Dr. Adrian Bull. We are working closely with the STP leadership to ensure that Digital is embedded in the STP process and that the benefits of exploiting Digital as an enabler to transformation are clearly articulated.

We are aware of the many advancing technologies that will fundamentally shift how the Health and Care economy works in the next 5 years and recognize the need to support culture shift required in our workforce to fully realise the benefits of digital. Our immediate priorities are outlined in our plan and lay the foundations for all future developments. Shared Citizen information is key to Digital development and this lies at the heart of our Local Digital Roadmap.

Our Programme plans show our intent to use a mix of more traditional development methodology and the more iterative style using the Government Digital Services', 'Digital Development Methodology'. We have assumed that resource to deliver our LDR will be available as required. Given the current economic pressures in the system we will ensure that our plans remain adaptable. We want to learn from other Digital programmes, both successful and otherwise and so are actively engaging with other footprints, NHSE and the LGA to ensure we learn from developments and advances that have already been made elsewhere.

There are significant opportunities to leverage the benefits of digital transformation, although there are significant challenges to realising these. Critical to our success is securing collaboration across our health and care system. To this end, we have been working together through our Digital Steering Group and Programme Board and we are wholly committed to using our combined efforts and expertise to make a positive impact for our citizens.

Digital is a key enabler of the S&ES STP. In learning from the past, we are proposing a multi-track approach to Digital development that we believe will deliver the best outcome for the Citizen and the Health and Care professional. We will exploit existing technologies as well as developing solutions that will share information across boundaries.

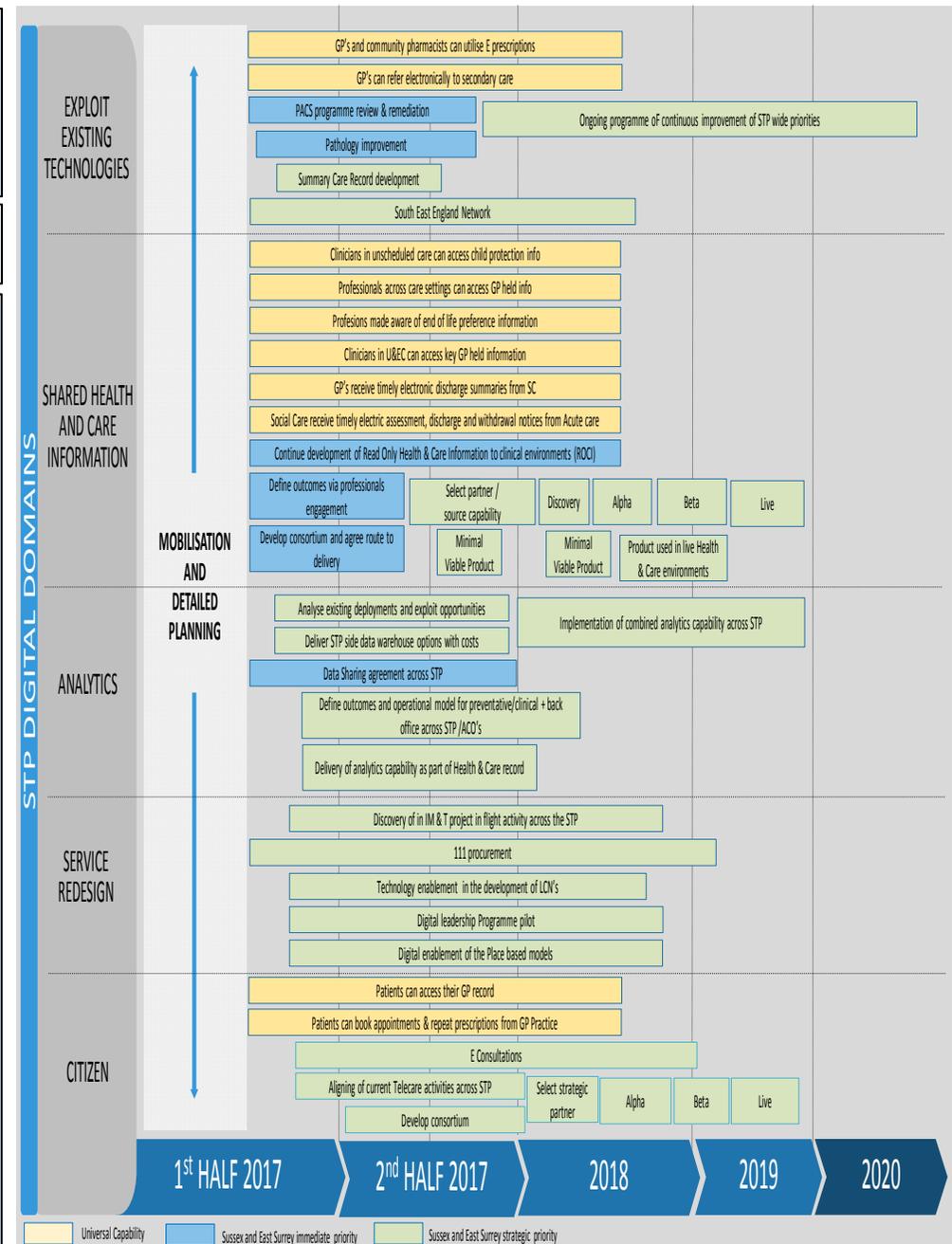
Strategic approach

Having mapped the STP priorities we have developed a plan that supports the delivery of those priorities. Digital Solutions that most benefit from scale in terms of procurement, cost, and integration capability, are implemented at STP level, not separately within each organisation. Many partners have made considerable investments in solutions to deliver Health & Care record information for their organisation. We will source solutions that join up this information across organisational boundaries. We will take a proactive approach to Digital being integrated into service redesign from an early stage to support the new models of care. We will develop solutions that help individual citizens to support themselves and to give Clinicians and Practitioners the ability to deliver care from a location of choice. We will take a programme approach that is governed as part of the STP.

Priorities

In supporting the STP priorities we have developed a Programme plan with five Domains and a subset of projects and Universal Capabilities within each Domain. The five Domains are;

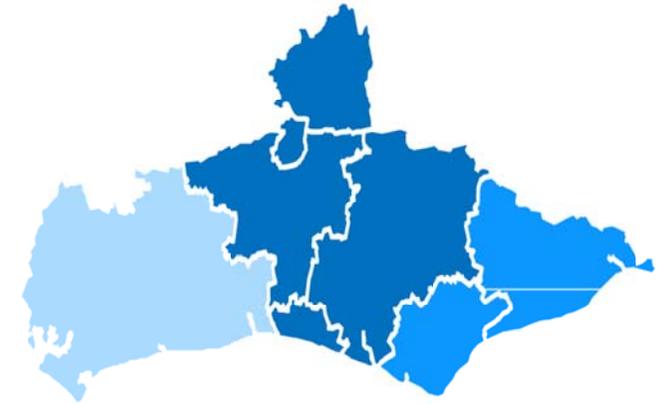
- Exploit existing Technologies** - We have identified key solutions that either require remedial action or further exploitation to bring significant benefit.
- Shared Health & Care Information** - We will continue to develop our current activity while liaising with NHSE to develop a long term strategic solution to sharing information across the whole economy including the citizen.
- Analytics** - To lead on the development of the definition of the analytics requirement across both STP and 'place based' structures.
- Service Redesign** - Working as an integral part of the design of new models of care and organisational design.
- Citizen** - To deliver solutions that enable the individual citizen to self-help and for professionals to manage their care from a location of choice, including outside a care environment.



Sussex and East Surrey Local Digital Roadmap

Our Local Digital Roadmap footprint

- Our footprint is home to 1.7 million people providing health and social care at a cost of £4bn
- 23 partner organisations are involved across all health and social care sectors
- There are over 37,000 medical practitioners across the footprint including over 1,000 GPs
- We are forming into three Accountable Care Organisations



Coastal Care

Coastal West Sussex CCG
Sussex Community NHS Foundation Trust
Sussex Partnership NHS Foundation Trust
West Sussex County Council
Western Sussex Hospitals NHS Foundation Trust
South East Coast Ambulance Service
GP Providers
IC24



Central Sussex and East Surrey Alliance

East Surrey CCG, Crawley CCG, Horsham & Mid
Sussex CCG, Brighton & Hove CCG, High Weald
Lewes Havens CCG
Queen Victoria Hospital NHS Foundation Trust
Surrey & Sussex Healthcare NHS Trust
Surrey & Borders Partnership NHS Foundation Trust
Brighton & Sussex University Hospitals NHS Trust
Sussex Community NHS Foundation Trust
Sussex Partnership NHS Foundation Trust
Brighton & Hove City Council,
West Sussex County Council
East Sussex County Council
Surrey County Council
First Community Health & Care
South East Coast Ambulance Service
GP Providers
IC24

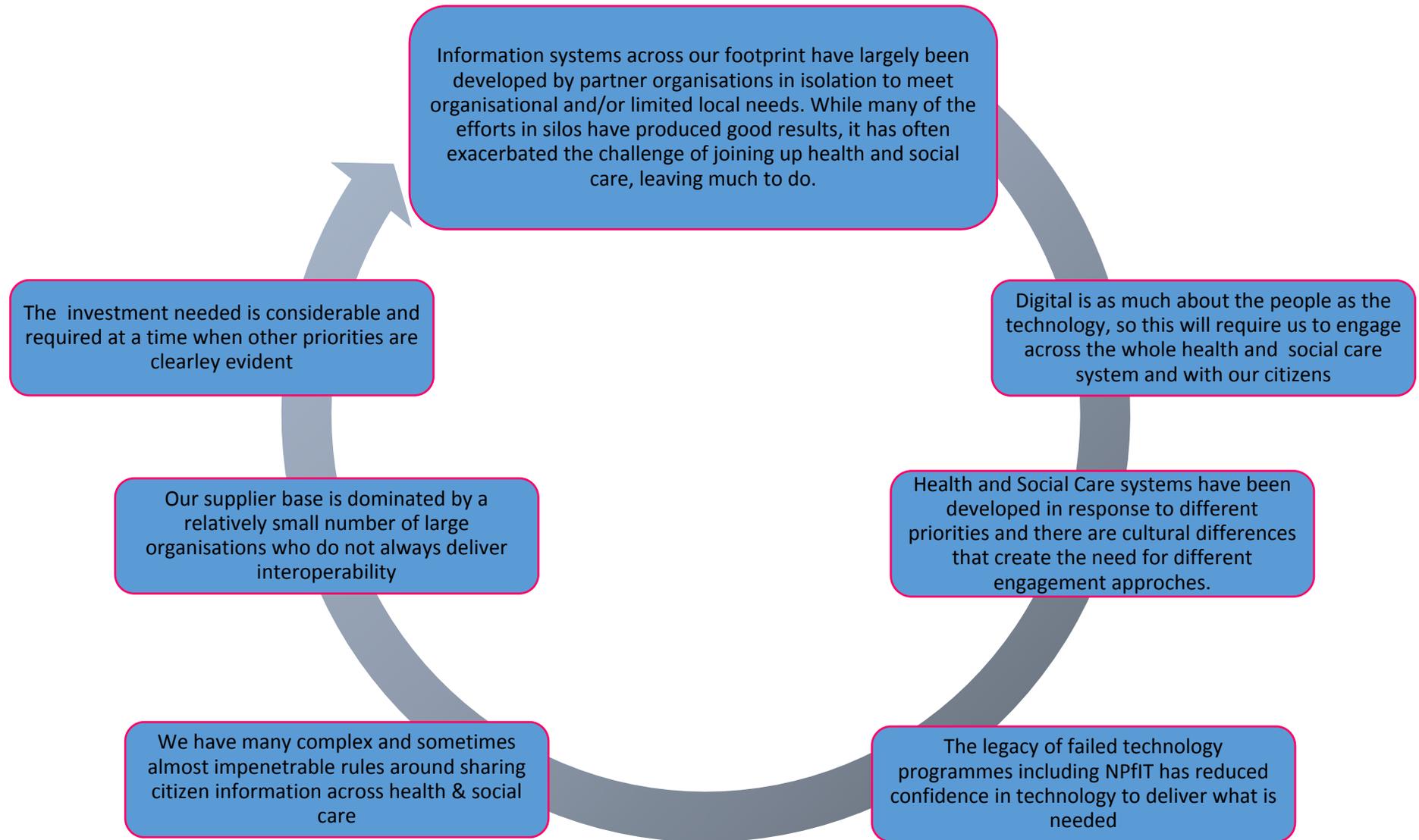


East Sussex Better Together

Eastbourne, Hailsham and Seaford CCG
Hastings and Rother CCG
East Sussex Healthcare NHS Trust
East Sussex County Council
Sussex Partnership NHS Foundation Trust
South East Coast Ambulance Service
GP Providers
IC24



Overview of the challenges we face



Our Digital vision for Sussex and East Surrey

In the eyes of our citizens, digital transformation will support the aim for care centred on them, providing immediate access to relevant information, whilst enabling individuals to view and contribute to their own record and care plan, confident in the knowledge that this information will be made available only to those practitioners involved in their care, with appropriate safety, monitoring and governance in place.

In the eyes of our Health and Social Care practitioners, digital transformation will enable radical changes to the professional-citizen relationship, improving communications, access to shared information and decision-making across all settings of care.

What will we hear our Citizens say when we deliver the Digital roadmap?

I feel supported and confident to use technology to help manage my conditions and make informed decisions

Risks to my health are managed and I know what to do in a crisis

I and my carers know where to get the advice we need

Shared information between all parties helps greatly to deliver a seamless service between the different people that look after me, they communicate with me and with each other as a team

My care is efficient and timely, clinicians know who I am and my story

The information about my care is consistent and of high quality

The people that look after me listen to me and have ways to create better services that are tailored to what is important to me

Our Digital Transformation Programme plan (including Universal Capabilities)

Domain 1: Exploiting Existing Technology

We have identified key solutions that either require remedial action or further exploitation to bring significant benefit.

Deliverable

To define, assist with the design and deliver a range of related projects within the domain. To ensure continuous alignment with other domains/projects in support of programme delivery, identifying and managing risks and reporting progress. This is the start of an ongoing activity which has two constituent parts. To analyse the current technology deployments that are common across the STP footprint and identify which are having the most negative impact on service. To analyse the current technology deployments that benefit multiple partners and identify which are not being exploited for non-technical reasons.

Diagnostic services

In a typical District, General hospital 400,000 imaging tests and multiple tests on 3 million pathology samples are undertaken. Currently the process for ordering tests and receiving results uses a combination of paper and electronic methods that vary from specialty to specialty and test to test. We believe an integrated diagnostic system that allows clinicians to easily and intuitively order and access the test results of patients will reduce the risk of error. As well as safety benefits, there are financial benefits. Some outpatient (OP) appointments are primarily a means to connect the test result to the patient. We believe that potentially the number of OP appointments could be reduced.

Managing images across Trusts is a challenge and a programme was set up to help resolve this issue with a supplier on board to support the solution.

We will further support this programme to help deliver the solution which will bring benefits to Clinicians and Patients and will reduce cost. This work will start in early 2017 and is the start of an ongoing programme of Digital activity to improve systems that have already been deployed.

Summary Care Record development and full deployment

Latest utilisation figures from providers are based on SCRs viewed vs unplanned admissions. We will continue to focus on improving the usage of the SCR while we develop more strategic solutions. We are also liaising with NHSE on exploiting SCR further especially for EOL preferences.

Prioritise infrastructure / connectivity solutions for Health & Social Care MDT workers

In order to realise our vision, we have come together to deliver seamless network connectivity between health and social care organisations in the South East of England, reducing duplication and cost whilst increasing the quality, flexibility and value of networking across the region. This ongoing activity (SEEN) is part of the LDR governance.

Universal Capabilities

GP's and Community Pharmacists can use electronic prescriptions. This has been fully deployed across the footprint but we now need to focus on improving the usage.

GP's can refer electronically to secondary care.

ESHT is currently running a project to refresh its service directories on the National Electronic Referral Service and has to date gone live across 6 different Specialties. This process is continuing with the plan that GPs will be able to refer to all Consultant led secondary care services via this method by the end of 2017/18.

Domain 2: Shared Health & Care Information

We will continue to develop our in-flight activity while liaising with NHSE to develop a long term strategic solution to sharing information across the whole economy including the citizen.

Deliverable.

To define, assist with the design and deliver a range of related projects within the domain. The focus is to deliver a shared Health and Care Record. To carry on with the development of the Read Only Care Information system (ROCI) and to take the learning into the strategic solution, which will be developed upon agreement of the target architecture with NHSE. To develop solutions using an 'Agile' methodology and have close engagement with Clinicians, Practitioners and Citizens.

To further develop the relevant Universal Capabilities and deliver a project plan by UC that will maximise benefit by the end of 2017.

Shared Health and Care Record

We recognise that appropriate information sharing is an essential enabler for new models of care. It underpins risk management, team working, and effective cost tracking. The development of a Shared Health & Care Record will have a profound impact beyond its direct operational capabilities (supporting the flow of high quality, up to date, patient level information between healthcare professionals), towards fundamental business process and culture change.

For some ambitions, such as an Accountable Care System, there would be great benefit in moving to a single IT system for core services. Even then, there will be requirements to communicate and interoperate with care partners outside of that system that will require some level of clinical system interoperability.

Our first phase of SHCR (Read Only Care Information - ROCI) is a system that allows health and social care professionals to quickly retrieve summary health and social care information for a patient or client. It aims to improve the information that is available to care professionals when managing patients who are being cared for across multiple organisations. Expanding development towards 2020 will see the SHCR form a cornerstone platform which will enable expansion across health and care settings and allow citizen input through a patient portal.

Universal Capabilities

These UC's will be a key part of the role of the Project Manager for this Domain who starts in early 2017:

Clinicians in unscheduled care settings can access GP information.

- In ESBT we have a Vulnerable Patients scheme underway with 3500 vulnerable patients with additional information including preferred priorities in the SCR which is available beyond the Primary Care setting.

Professionals across Care settings access GP information.

- This is steadily improving and the deployment of ROCI as a pilot in Secondary Care settings is providing an alternative way of achieving this objective.

Professionals made aware of EOL preferences information.

- We have a pilot underway in Coastal Care which brings together Health and the third sector to trial a new approach to this.
- We are exploring the option of having this as part of additional information in the SCR.

GP's receive timely electronic discharge summaries from Secondary Care.

- This has been a major focus across several trusts and we will be working with all trusts in 2017 to develop this further.

Social Care receives timely electronic assessment, discharge & withdrawal notices from Acute Care.

- We have aligned Health & Social Care teams who working across secondary care providers monitor this activity.

Domain 3: Analytics

It is clear from the STP that there will be a significant need for analytics across both the STP and place based structures. Data is the enabler to better identify individual patients requiring intervention and to understand whole population needs.

Deliverable.

To define, assist with the design and deliver a range of related projects within the domain. To have explored the relevant multiple implementations and expertise across all the STP partners, summarise the learnings and present the findings.

To review what has been learned from activities elsewhere in the Health economies in this country and abroad. To show how they have integrated with other relevant work groups such as Shared Care Record to understand the potential of a joint approach.

Review existing deployments and exploit opportunities.

There is a large amount of activity across the STP footprint providing analytics. There are many different types of analytics carried out at a Commissioning and Provider level. There are broadly two types of analytics; the patient level data and the wider population. Each of the 23 partner organisations has their own capability and often multiples of analytics teams across different functions. This leads to data being presented in different ways and often using a different base which results in conflicting data and possible incorrect or delayed decision making. We will review the current position and propose options to the STP Governance to agree a way forward.

STP wide Data Warehouse proposal

Several other LDR areas either have or are proposing a large Data Warehouse model often engaging Cloud providers to deliver the infrastructure. We are not yet convinced that this is the right model for this STP so we will be carrying out analysis to understand costs and benefits. This will require us to engage with other LDRs and third party suppliers. We can see that it would be beneficial to have all the data in one place but we need to understand the costs and timescale to achieve this as large technology projects such as this working across multiple partners do not have a good record in this sector.

STP Wide Data Sharing Agreement

We already have several data sharing agreements in place across a variety of partners. If we are to deliver solutions such as a Shared Health and Care Record, we will need to have a robust agreement in place. We will also need to invest considerable effort in this discussion with the Citizen as ultimately, they own the data about themselves and increasingly we are proposing to share information with them so they can manage their own care. This agreement will also need to consider some of the practices of our technology providers whose software configuration make it difficult to share information.

Defined outcomes and operational model for preventative / Clinical and back office across STP and ACO's

There are several initiatives underway in secondary care which are using data to help Clinicians to make effective decisions and alert them to a patient's condition. In tandem with developing the Shared Health and Care Record we show how we will use this wealth of information to deliver benefit through preventative care at a patient level. This shared data will also be used to improve the quality of population health data across the STP. This work will be closely aligned to the work around exploiting opportunities from existing deployments.

Agile development.

Much of the development in this area will be carried out in an agile way to gain iterative benefit as large projects carry a real risk of delivering poor ROI.

Domain 4: Service Redesign

Inherent within this domain is to have the ownership shift to the organisation from designing services in an analogue way to one which has Digital at its heart.

Deliverable.

Analyse the current technology landscape across the LDR footprint and report the findings to the Digital Programme Board for action and to agree strategic direction. To support the delivery of the 111 programme by delivery of its digital tools. Proactively work with emerging new operating models such as LCN's and ACO's, understand their requirements and deliver a technology strategy and implementation plan that will support their organisational needs.

Actively pursue the delivery of cultural change through developing a digital leadership model across the footprint. To start with, a pilot Digital Leadership Programme.

Discovery

Carry out an audit of current, live projects with a Digital involvement. This audit will include a summary view of timescale, deliverables and cost. To review the audit work underway in ESBT to establish if this work should be extended across the footprint. To recommend to the Programme Board options on governing Digital change in the future.

This analysis should include an assessment of mobile working technology availability such as Wi-Fi.

In reviewing the projects an assessment will be made on the engagement of the Digital capability in design of projects as opposed to being a mechanism to deliver.

111 Procurement

The 111 service is being re-procured. There are several options to deliver the technology platform to support the service. We can buy the complete service from the provider and they will use their own technology stack to deliver the service or there is an opportunity as part of this procurement for the Technology stack to be purchased separately which can then be utilised across the wider estate. One of the key opportunities is the development of a CRM model that could be used across the footprint to record Citizens' interactions. This will be considered more broadly in conjunction with the delivery of a shared Health and Care Record.

Enablement of LCN's & ACO's, Clinical Hubs and Social Care Hubs

New models of care will require greater workforce flexibility in how and where care is delivered. Robust technical solutions will be implemented to support clinicians working across bases and locations in order to maximise health and social care system capacity. As the three ACO models form we may need to deliver solutions at a different pace.

We have slightly different models forming across the footprint and we will be flexible in our response while trying to ensure consistency in standards to maximise interoperability. We will need to deliver short term tactical solutions to meet operational needs whilst understanding the strategic direction. We will be utilising the skills within our Digital Design Authority to deliver the standards and protocols required.

Digital Leadership Programme Pilot

In recognising that Digital is as much about the people as it is about technology we believe this requires leaders in our organisation to adapt their thinking. To maximise our investment, Digital needs to be an integral part of service redesign.

We will be seeking a service redesign programme that we can demonstrate the power of Digital development in a more iterative way. We will propose a programme which will start with a pilot to shift the approach to care. This will largely focus on the community and how it can best support itself and adopt supporting solutions.

Domain 5: Citizen

The development of technology and practice to support the digital interaction of Citizens with the Health and Social Care system.

Deliverable.

To analyse the current technology deployments that are common across the STP footprint for use by the citizen and assess their usefulness and current level of exploitation. To report to the DPB and onwards to the STP PB on the opportunities available and associated benefits of exploitation. To analyse the multiple variants of Telehealth and Telecare whether in a preventative mode or delivering service through technology. To propose a strategic direction and gain agreement on an implementation plan that will coordinate activity across the footprint.

To consider technologies such as Electronic Consultations and research their benefit from other pilots across the UK. To agree a pilot and, if relevant, a rollout across the STP footprint.

Citizen Portal

We already have several Citizen portals in place across different Care and Health settings. These are very often siloed by either organisation, care type or clinical need. Under Domain 4 we explain a possible approach to 111 and this could overlap with this development. We want to be very clear about the need of our citizens and whether a portal is the solution to their needs. There seems to be growing evidence that people living with long term needs or conditions, find such a tool very useful and aids their desire of being in control of their care. To make some of the changes required to deliver this will also need to be closely aligned with change management to enable new ways of working. This development is also closely associated with the development of a Shared Health & Care record and indeed they may be part of the same programme of activity.

Electronic Consultations

This is a term that encompasses the ability for Practitioners and Clinicians to hold consultations and assessments remotely with Citizens. We will take learning from trials already within the system so we do not duplicate learning. We have volunteers in Primary care who wish to trial this and we will commence this in 2017. There are risks around increasing the demand on Clinicians and Social Care practitioners. We will also explore the options around online consultations.

Alignment of Telehealth & Telecare activities across the STP footprint.

Develop a Consortium.

We have two activities underway in this area in ESBT and with WSCC. These are engaged with central NHSE TEC programmes and external consultants to measure benefit and share learning. During 2017 we will share the learning across the initiatives and agree a common approach. We anticipate that this initiative will require support from third parties as well as the community and to that end we intend agree our route to market and develop a consortium. We may decide to build a solution, join with another footprint or seek private sector support in our ambitions.

Universal Capabilities

Patients can book appointments and repeat prescriptions from GP practice.

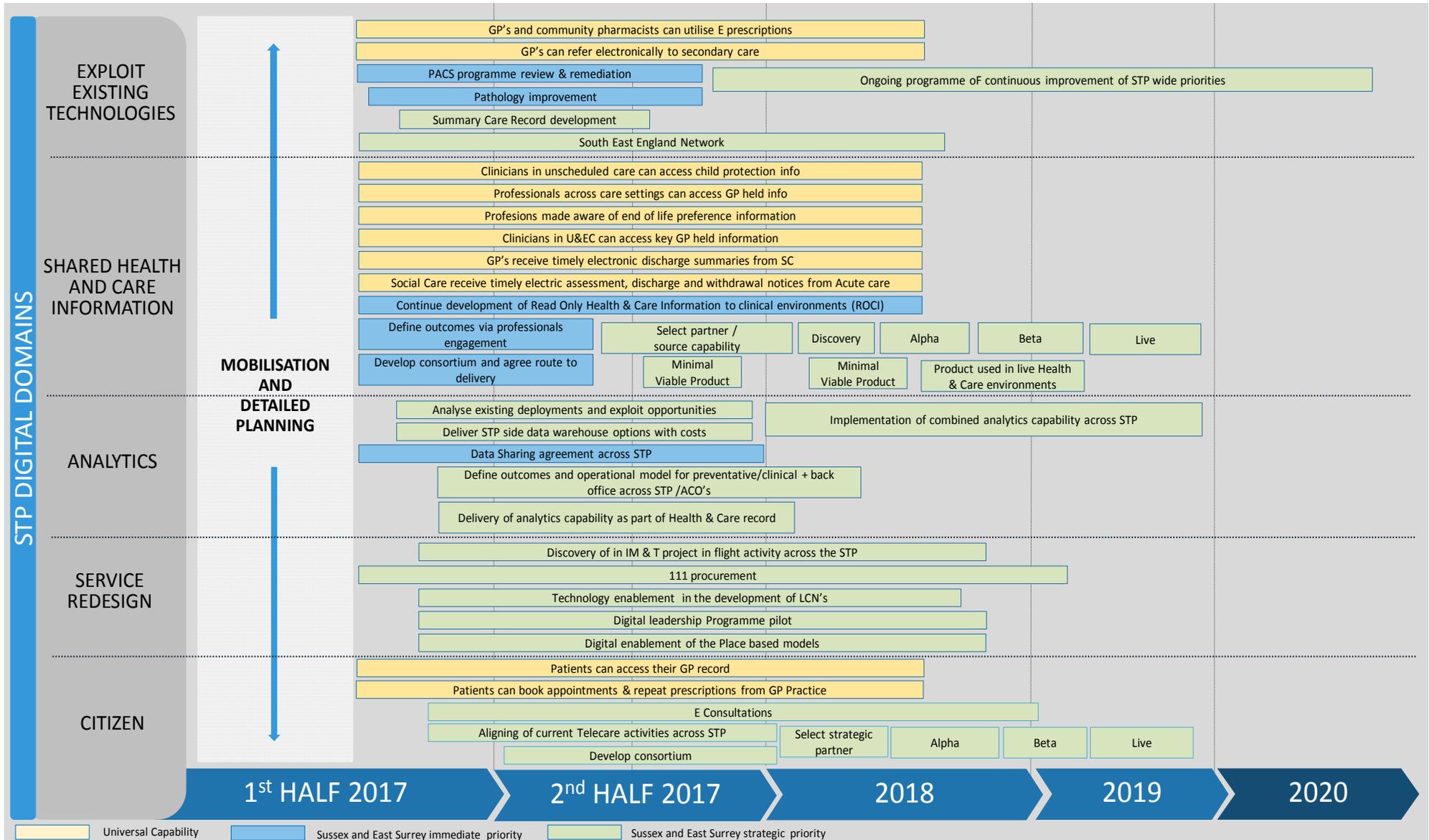
Patients can access their GP record online.

This facility is available in all GP Practices in our LDR footprint. The take up by patients is very variable across the footprint. While the GP's have a target, this is not contracted. Our soft analysis shows that there are different approaches from GP receptionists and that the take up is often dependent on the patient's frequency of GP visits. This is largely a 'Behavioural Change' activity and we will be discussing with the STP how we can support a GP and population change in behaviour. We have produced a report on appointments and bookings for July 2016 and will be using this data to support our improvement plan. There is a central NHSE initiative underway which we will be participating in.

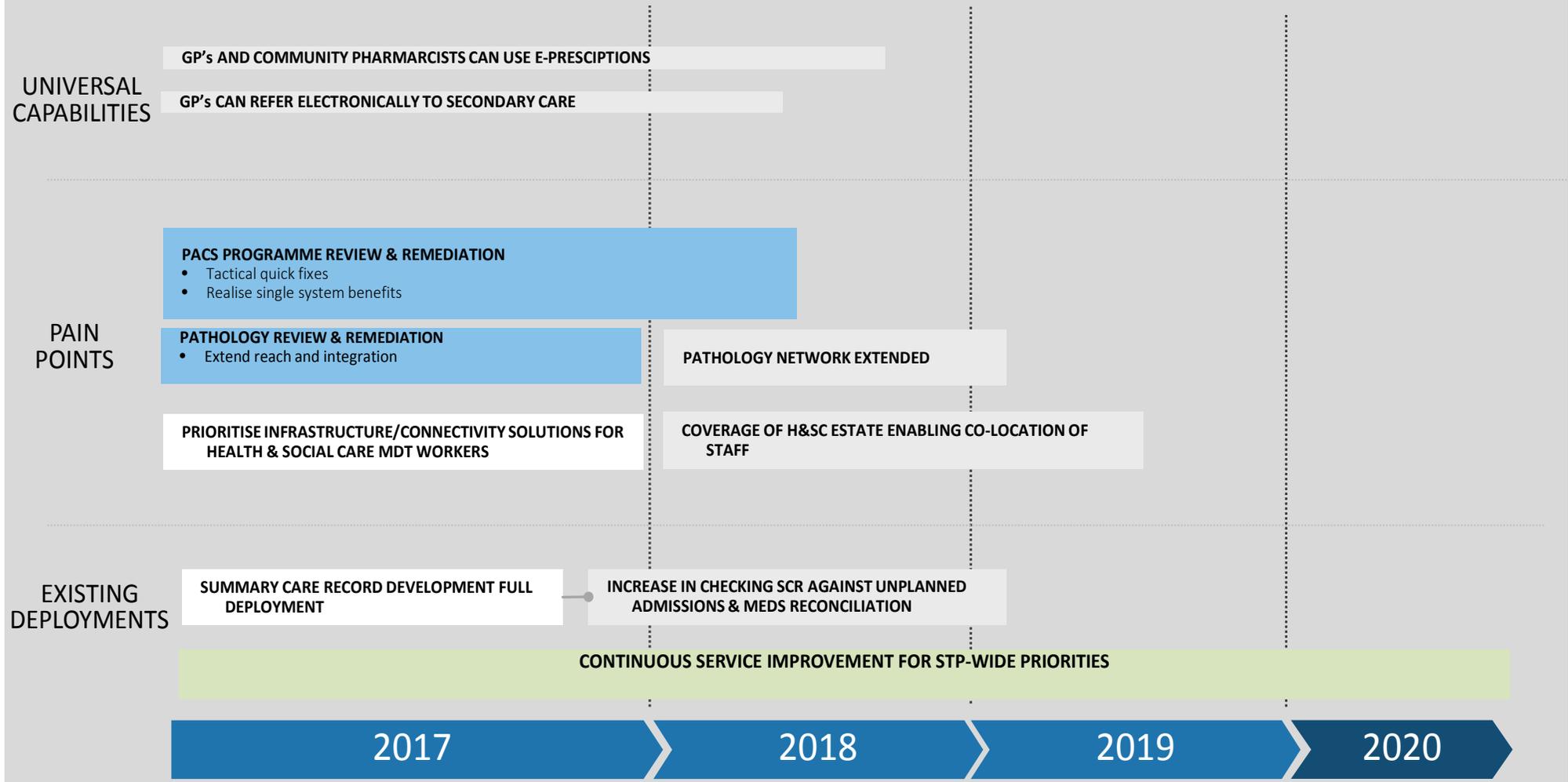
The benefits of our Digital Transformation Programme

	Exploit current technologies	Shared Health & Care information	Analytics & risk stratification	Digital leadership & service redesign	Citizen access
Stakeholders					
Patient	<p>More standard practice across organisations.</p> <p>Faster service.</p> <p>Increase predictability of timing when data will be available.</p>	<p>Tell their story once.</p> <p>Personal preferences shared.</p> <p>Less time in hospital.</p>	<p>Needs identified quicker.</p> <p>Reduced risk.</p> <p>Preventative support.</p>	<p>Service technology more aligned to Citizens' expectations.</p> <p>Service design more Citizen focussed.</p>	<p>Increase opportunity for self-care.</p> <p>Ease of access to services.</p> <p>Citizens in control.</p>
Clinician and Practitioner	<p>Remove technology barriers.</p> <p>Ease of working.</p> <p>Less paper.</p> <p>Improved morale.</p>	<p>Making more informed decisions.</p> <p>A view across Health and Care.</p> <p>Increased safety.</p>	<p>More targeted focus on priority groups.</p> <p>Safer care.</p> <p>Improved predictability of need.</p>	<p>Digital working as standard.</p> <p>Increased influence on design of service.</p>	<p>Reduced query resolution.</p> <p>Less staff admin and increased availability for care.</p>
Organisation	<p>Safer care.</p> <p>Increased efficiency and reduced cost.</p> <p>Return on investment.</p>	<p>Enabling the ACO model.</p> <p>Efficiency across the system.</p> <p>Whole system view.</p>	<p>Evidence to target interventions.</p> <p>Reduce demand.</p> <p>Whole system view.</p>	<p>Reduced paper.</p> <p>Optimised services.</p> <p>More community ownership.</p>	<p>Reduced dependency from Citizens.</p> <p>More automation for admin activity.</p>

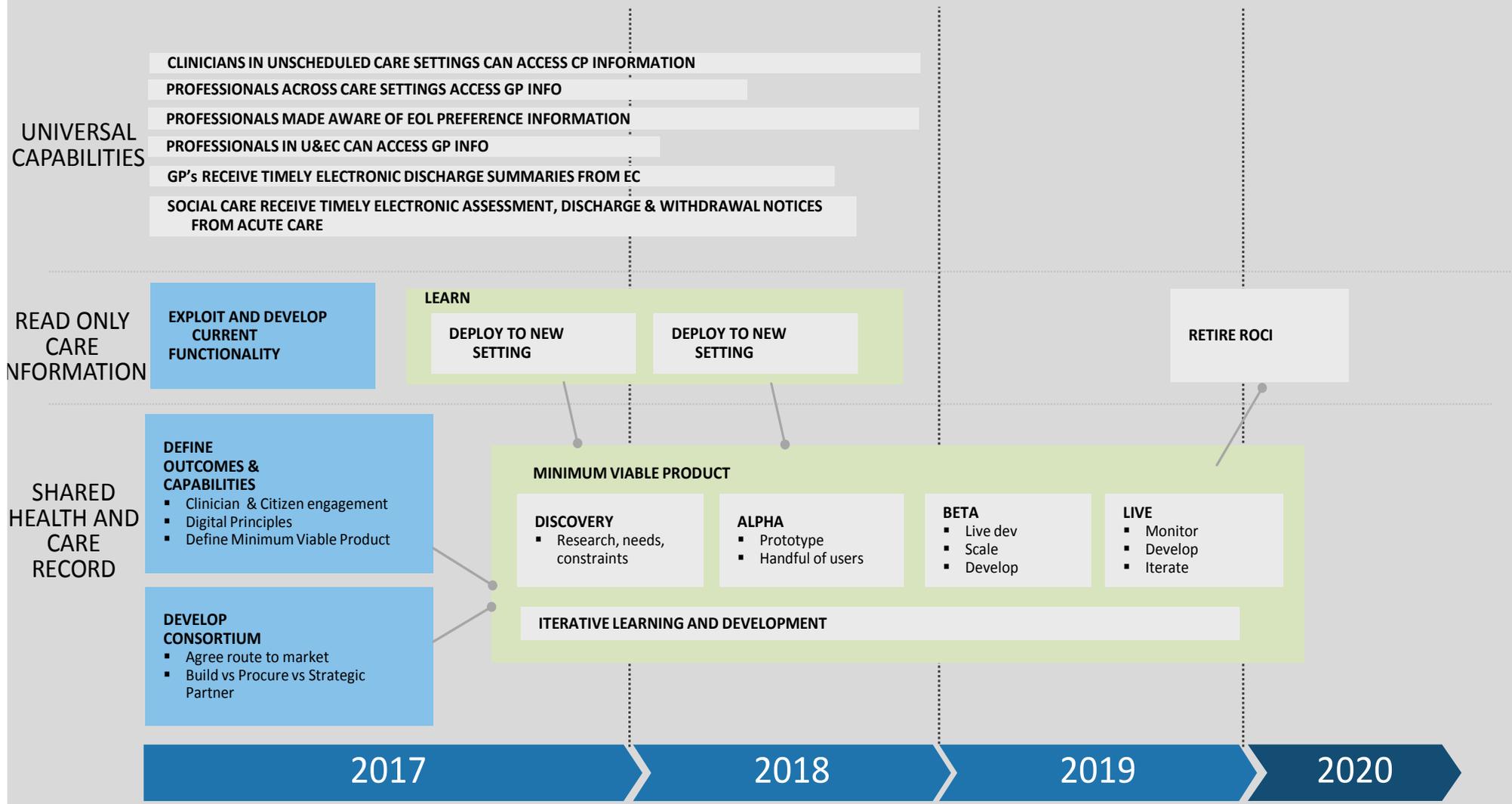
Sussex and East Surrey Local Digital Roadmap



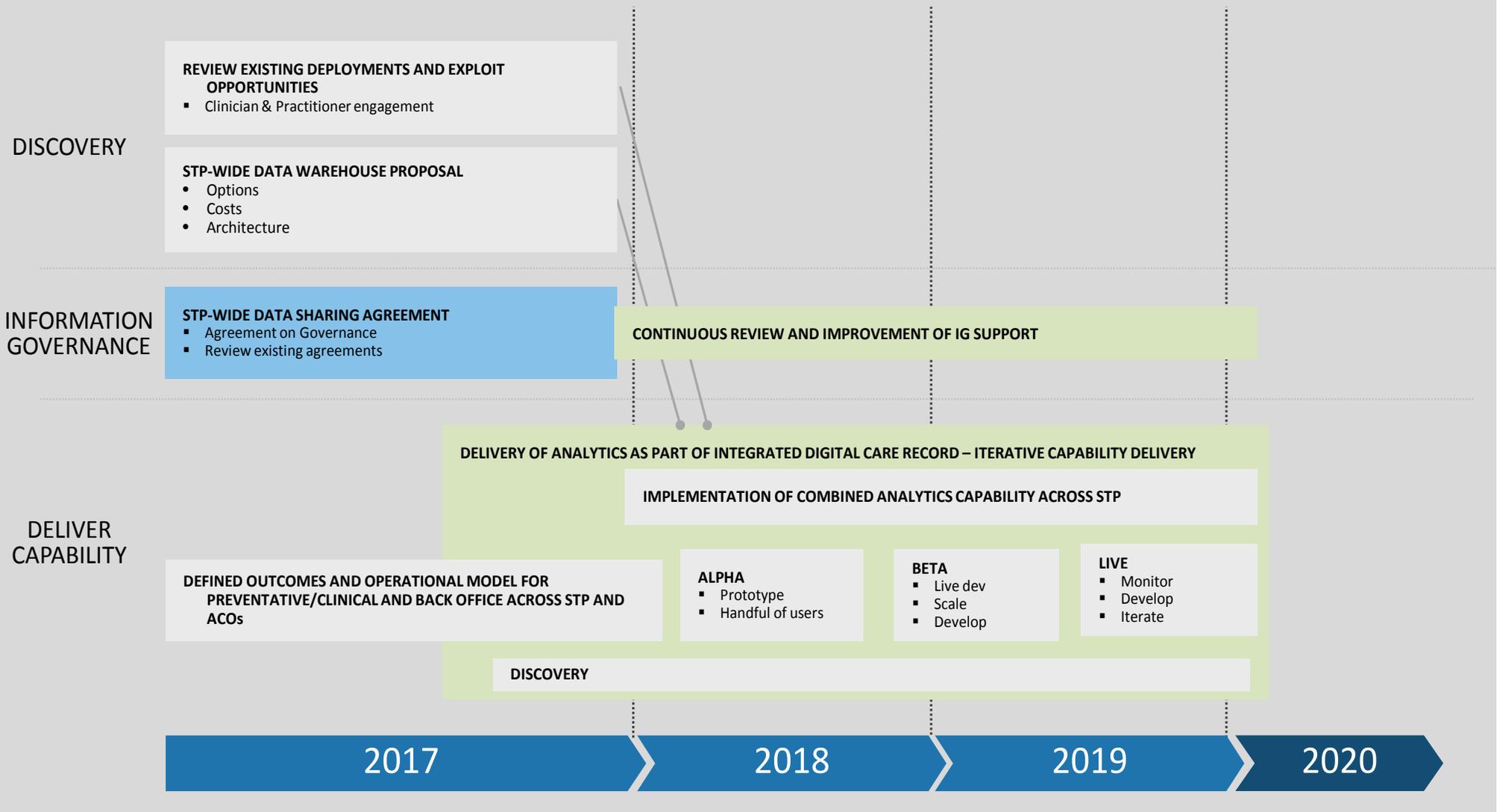
EXPLOIT EXISTING TECHNOLOGIES



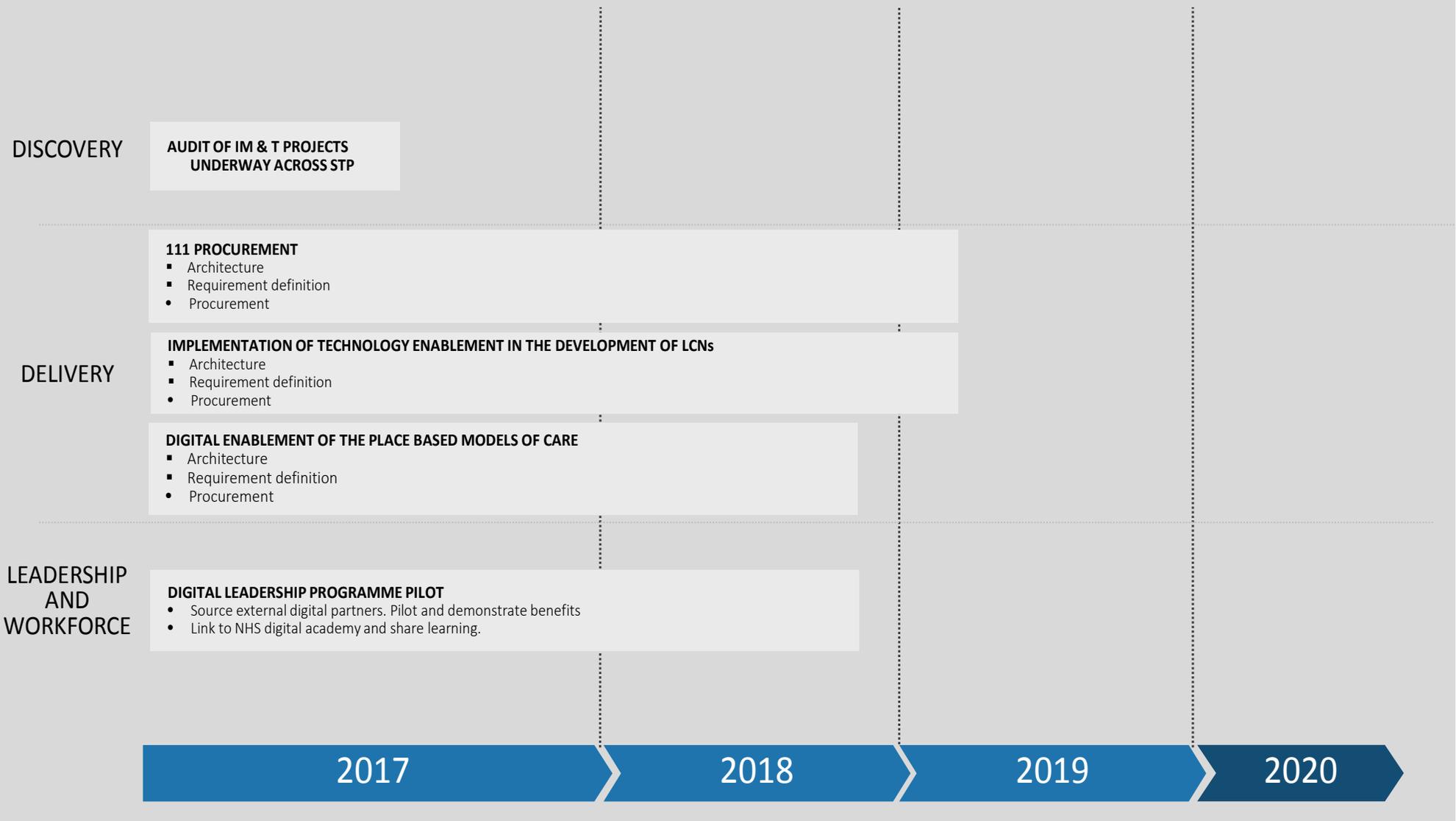
SHARED HEALTH AND CARE INFORMATION



ANALYTICS



SERVICE REDESIGN



CITIZEN

UNIVERSAL CAPABILITIES

PATIENTS CAN BOOK APPOINTMENTS AND REPEAT PRESCRIPTIONS FROM GP PRACTICE

PATIENTS CAN ACCESS THEIR GP RECORD ONLINE

PROFESSIONAL INTERACTION

CITIZEN PORTAL

MINIMUM VIABLE PRODUCT/SERVICE

DISCOVERY

- Research, needs, constraints

ALPHA

- Prototype
- Handful of users

BETA

- Live dev
- Scale
- Develop

LIVE

- Monitor
- Develop
- Iterate

E-CONSULTATIONS

LEARN & REVIEW

DEPLOY TO NEW SETTING

DEPLOY TO NEW SETTING

TECHNOLOGY ENABLED LIVES

ALIGNMENT OF CURRENT TEL ACTIVITY ACROSS STP

- Clinician engagement

MINIMUM VIABLE PRODUCT/SERVICE

DISCOVERY

- Research, needs, constraints

ALPHA

- Prototype
- Handful of users

BETA

- Live dev
- Scale
- Develop

LIVE

- Monitor
- Develop
- Iterate

DEVELOP CONSORTIUM

- Agree route to market
- Build vs Procure vs Strategic Partner

DISCOVERY

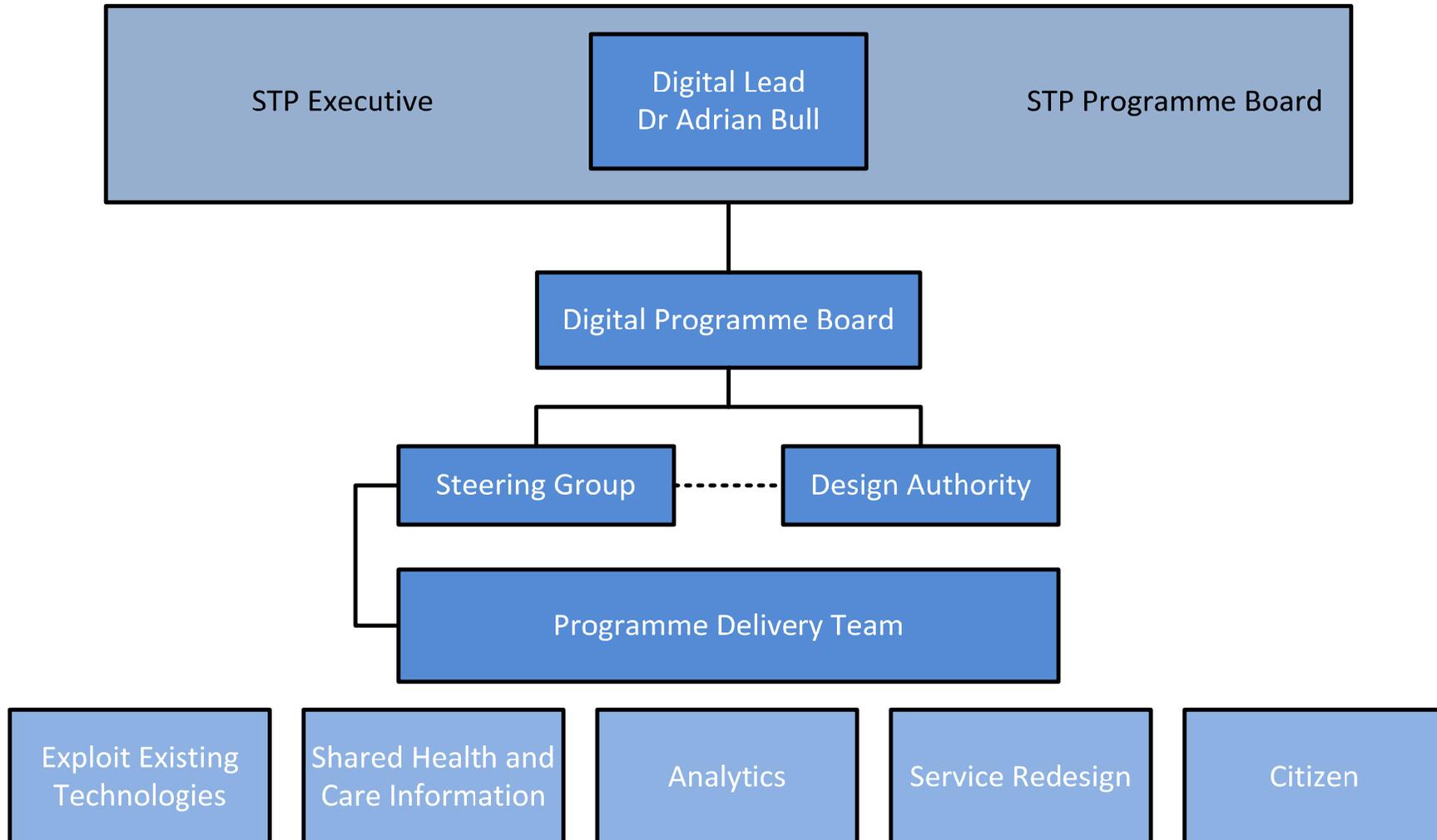
2017

2018

2019

2020

Sussex and East Surrey STP Digital Governance



Glossary: Acronyms used

Acronym	Meaning
ACO	Accountable Care Organisation
CCG	Clinical Commissioning Group
CSESA	Central Sussex and East Surrey Alliance
CEO	Chief Executive Officer
CRM	Customer Relationship Management
E-	A prefix to a word that indicates it is electronic and not manual
EOL	End of Life
ESBT	East Sussex Better Together
ESHT	East Sussex Healthcare Trust
IC24	Provider for Out of Hours service
IG	Information Governance
IM&T	Information Management and Technology
LCN's	Local Care Networks
LDR	Local Digital Network
LGA	Local Government Association
MDT	Multi-Disciplinary Teams
NHSE	National Health Service England
NPfIT	National Programme for IT (Programme is now closed)
PACS	Picture Archiving and Communications System
PB	Programme Board
ROCI	Read Only Care Information
ROI	Return on Investment
S&ES	Sussex and East Surrey
SCR	Summary Care Record

SEEN	South East England Network
SHCR	Shared Health and Care Record
STP	Sustainability and Transformation Plan
TECS	Technology Enabled Care Services (also known as Technology Enabled Lives)
UC	Urgent Care
WSCC	West Sussex County Council